DOCUMENT RESUME

ED 259 331 CS 208 893

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TITLE A Psycholinguistic Description of the Development of Writing in Selected First Grade Students.
PUB DATE [82]
NOTE 24p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Content Analysis; Developmental Stages; Educational Philosophy; Grade 1; Language Acquisition; Primary Education; Psycholinguistics; *Skill Development; Writing Evaluation; *Writing Improvement; Writing Instruction; *Writing Processes; *Writing Readiness; *Writing Research; Writing Skills
IDENTIFIERS Stylistics

ABSTRACT

A study was conducted to examine writing development in first grade children. The writings from an entire classroom were collected. From these, six children's writings were chosen for cross-sectional analysis. Two children from this group were then selected for further in-depth case studies. Interviews, parent surveys, and observations were used to monitor children's writing development. The results indicated that first grade students were able to construct meaningful messages in writing, but that the school setting as well as societal attitudes can influence children to focus on the conventions of writing while ignoring the need for writing to have meaning. The results also indicated that first grade students were able to learn to write in a way similar to the way they learned to speak: through social interaction and experiences with others. Their writing contained some salient features that adults produce in their writing. Finally, the results indicated that children focused on conventions of writing, as they realize that print conveys a message and that by using certain conventions they aid the reader in understanding their message. The various writing conventions develop at different rates depending on how crucial they are to the writer's ability to construct meaning for the reader. (HTH)

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A PSYCHOLINGUISTIC DESCRIPTION OF THE DEVELOPMENT OF WRITING IN SELECTED FIRST GRADE STUDENTS

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Abstract

The purpose of this study is to examine the development of writing in first grade children. The writings of the entire classroom were collected; from these six children's writings were chosen for cross-sectional analysis. Two children from this group were further selected for in-depth case studies. Interviews, parent surveys, and observations were employed to monitor the children's writing development.

The subjects already had a rich, though varied, background of experience with writing when they entered first grade. Many invitations to write were given during the year, which resulted in three major types of writing: journals, notes, and stories.

During the year, the children grew and developed in a way similar to the way they once learned to speak, learning how to write through their interactions and experiences with others. They became aware of the needs of an audience, could determine the type of writing appropriate to a particular setting, used syntactic features that other writers use, and wrote to fulfill personal needs. As the children wrote, they discovered that certain conventions, such as spelling and punctuation, are used by writers to allow their message to be understood. The rate of development varied according to how critical these conventions were to the ability to communicate.

The study demonstrated that children who have a message to communicate construct meaning as their first priority. As they use writing, they gain knowledge of the writing system and change occurs in their understanding of the syntactic, semantic and orthographic systems, allowing them to create more complex meanings for their readers.

Children want to write! Put a child together with writing implements and a purpose for writing, and the result could be a sign on a bedroom door, a telephone message, or a letter to a grandparent living in another city. Many children are involved with and creating written messages within home settings. As they enter school they bring varying abilities, interests, and experiences with which to deal with writing.

However, until recently, for most children, these spontaneous messages were not recognized as valuable, and the beginnings of writing were associated with the skills of handwriting, spelling, and vocabulary taught in the first grade classroom. Graves (1978) noted that most schools emphasize that these skills must be taught preceding composition, and in fact so much time is devoted to these drills that there often is little time left for writing.

Furthermore, when the study described in this article commenced in the mid-1970s, a search of the related literature revealed very little writing research had been done. Graves (1980, p.914), in a similiar review, came to the same conclusions:

> Only 156 studies on writing in the elementary grades, or an average of six annually, have been done in the United States in the last twenty-five years. Writing research was in such low esteem from 1955-1972 that eighty-four percent of all studies was done by dissertation alone. Eighty-one percent of all dissertation research in this period involved experimental designs seeking to find "good methods" in the teaching of writing. . . From 1955-1972, sixty-eight percent of all research was concerned with what the teacher was doing in the classroom. . Only twelve percent of the studies were concerned with a look at what children did when they wrote.

During the past decade, a dramatic change has occurred in the

area of children's writing. Most recently, interest in children as writers has begun to increase. Naturalistic observational techniques borrowed from oral language studies are being applied to the study of written language. The focus of these research studies is not merely writing instruction, but what the children themselves learn about writing. Research in this development of writing includes descriptive longitudinal studies both in home and school settings. Graves (1973) reported a single case study of Michael as part of his dissertation research involving four classrooms. Bissex (1980) studied her son's development of writing over a six-year period from age five to age eleven.

Many teacher researcher teams are studying writers in classroom settings. Graves (1981) studied two populations of children (grades 1 through 2, grades 3 through 4). Individual case studies are reported by various members of the research team on aspects of the writing process, such as spelling, punctuation, and revision (Kamler, 1980; Rule, 1982; and Calkins, 1980). Donnelly and Stevens (1980) report the writing strategies two girls used from first through third grade. Gerritz (1975) reported the spelling of vowel sounds that first graders used in her classroom. Sorenson and Kerstetter (1979) described the phonetic spellings of Wes, a kindergartener in an open-space K-1 classroom. Each of these studies contributes to the developing picture of the diversity with which the writing process can take place as well as the universals of

development found in various children, and the realization that children bring much knowledge with them to the classroom as they begin to write. Articles (Chomsky, 1975; Giacobbe, 1981; Milz, 1981a) are being disseminated which will help teachers translate these understandings into practice.

The purpose of the study described in this article was to build on and extend the growing base of information about beginning writing in school-age children by describing and analyzing the writing development of six first-grade children.

Answers to the following research questions were the focus of the study:

1. What aspects of a child's background have influence on writing development?
2. What changes take place in the child as a writer over the period of one school year?
3. How does the child's use of conventions of the writing system including spelling develop over the period of one school year?
4. How does the child construct meaning through writing over the period of one school year?

As researchers, teachers, and parents begin to understand how writing develops--rather than how adults believe it should be taught, this information helps to make writing more accessible for all children. With greater knowledge about how the writing process occurs in children and how it develops in the school environment, teachers are able to develop curriculum which encourages and supports writing development. At the same time, teachers

will be able to share information with parents so that they may be a part of an educational team which supports young writers.

The emphasis in this report of the study will be placed on a description of the procedures used to collect and analyze data detailing the writing development of the children as they created meaning within written text. Conclusions and implications formulated from these findings are presented. This was done because the overall complexity and extent of the actual study precluded a full report in this short paper.

Procedures

Children

The children who provided the writings for this study attended a public school in a suburban residential community approximately 20 miles northwest of Detroit. The classroom was a heterogeneous, combination first-second grade formed to maintain the district class-size ratio. The children reflected diverse ethnic origins, varying abilities, multi-interests and experiences--typical of differences found in any classroom.

Teacher

In this study, the classroom teacher was the researcher. The study began because over the years, children had presented the classroom teacher with notes and little stories, often using creative spellings, interesting punctuation placement, and other unusual elements scattered throughout the writings. It seemed logical to begin where writing was, and had been taking place--in her classroom. Guba (1978, p.13) describes the teacher-researcher

role when he states:

> He is concerned with description and understanding. . . immersing himself in the investigation with as open a mind as possible, and permitting impressions to emerge. As impressions are formed, he checks them out by various means, e.g. "triangulation," testing one source against another until he is satisfied that his interpretation is valid.

In a dual role of teacher-researcher, the author of the study was able to continually observe the subjects on a daily basis as the normal classroom activities were carried on as they occurred naturally and spontaneously.

Classroom Methodology

Language development was the primary concern of the classroom. Inasmuch as language develops through use, the primary goal of the teacher was to provide opportunities for this to happen. Children were reading, writing, discussing and listening at the appropriate times.

Writing was an on-going daily activity in the classroom. There were no "writing periods" with specific teacher-assigned activities, although four specific writing activities were introduced to the classroom. They were: (1) note writing; (2) personal journals; (3) class-collaborated books; and,(4) individually-authored books (Milz, 1981b). Children spontaneously wrote as they needed to write in order to fulfill their own particular purposes.

At all times when children wrote, they were expected to write as much on their own as possible. When a child asked an adult for the spelling of a word, they were encouraged to try it themselves

by the question "How do you think it starts?" When children asked if their invented spellings were spelled correctly, they were told they had spelled the word as other six and seven-year-olds do; but if they pressed further, an adult spelling was given. The children were usually pleased with being able to write independently. They also were asked to share their writing with adults in an effort to teach the adults more about how children beca writers and thus, they became major informants in the research s udy.

Data Collection

Writing was collected from all the children in the classroom from September 8, 1976, to May 1, 1977. No child was favored as a potential subject, and all were expected to write. A master file was set up for each student, and each piece of writing was arranged by date. Collection of the writing involved several procedures. First, all notes written to the teacher were answered and the original note from the child was dated and filed. If notes written to other children were thrown in the wastebasket, they were retrieved, dated and filed. When a journal was completed, the pages were photocopied so that the original notebook could be returned to the writer. Rough drafts were usually discarded after a book reached the typed form. If so, these were dated and filed, but if the children wished to keep them they were allowed to do so after a photocopy was made. Last, each parent was asked to send in a folder of writing collected at home each month. This could contain samples of writing done at home or writing brought home by the child. If a child wrote a letter to a grandparent,

for example, the parent was asked to copy the letter before mailing it so as not to destroy the child's intent for writing. A copying machine was available at the school for this purpose, but several parents were able to make the copies at their place of employment. All writing at home was coded AH when it was received by the parent.

At the close of the data collection period each classroom member's writing file was organized into a large loose-leaf notebook according to chronological date. At this time the child's age at the date of writing was entered on each page. The entire data bank of 6,865 pieces of paper was microfilmed for possible future study, and any original writings were returned to the twenty-eight writers.

Six subjects were selected for cross-sectional analysis. First grade writings were chosen because it was thought they were more likely to be at earlier points of development of writing. The final six children were determined because they were close in age and to have three boys and girls in the group. From this group, two children were chosen for in-depth case studies of beginning writers. Two photocopies were made of the writings of the six selected subjects to be used as working copies by the researcher, as well as to allow all decisions to be reviewed by a second reader to test the reliability of the data analysis.

A classroom diary was kept describing the classroom environment and procedures. Notes concerning conversations with parents regarding their children were kept in the diary, as well as teacher observations relevant to the development of writing in individual

children. Discussions with the kindergarten teacher describing her program were noted in the diary.

A parent survey adapted from a survey used by Durkin (1966) was designed to provide information on the family, as well as information concerning the early reading and writing of the children. The survey was distributed to the parents at an informational meeting and was returned to the researcher.

Analysis of Data

All of the writings of the six children chosen for intensive study were analyzed and organized into four categories designed to answer the research questions in the study: general background; the child as a writer; the child's use of conventions of the writing and spelling systems; and an overview of the child's construction of meaning within written text. The discussion of the types of analysis will begin with the last category, since the construction of meaning was the overall concern of the study and had impact on the understanding of all other categories.

Overview of the Child's Construction of Meaning Within Written Text

Each piece of writing was analyzed to determine what the child wanted to say. Understanding the child's meaning was usually not difficult, as the teacher and the children shared the same experiences and environment. Also, the children frequently read their writings to the teacher, which provided additional clarifying information. If the child read the message, cursive notes were entered on the margins of the pages whenever necessary in order

to retain the child's meaning. If the child had not read the passage orally, the researcher still was often able to read the message as the child's writing patterns became evident. A second reader validated each decision on meaning.

One example of the researcher's search for meaning and agreement occurred during the analysis of Figures 1 and 2. Ted used an expression So how do you like that? in his writings along with other varied messages for a period of two weeks. On November 12, he could not help to reconstruct the end of the message. On November 17, he read the entire message that he wrote on this day, It has been a nice day, so how do you like that? The end. He had used smaller letters for that and the end, eliminating the conventional spacing between the words the and end, merging that and the as he wrote HATHED. By re-examining the November 12 entry, which was the last of a series of four pages ending with HEN, the researcher and second reader noted the similarity to the ending words on November 17. They agreed, based on this kind of examination, that Ted began the with an H and blended it with EN or ED to create the meaning The end (Figures 1 and 2).

The Child as a Writer

A word count of each child's writing was made to provide the units on which subsequent analyses were to be based. All words were counted, including names, labels, the month from the date, salutations, and closings. Numbers were only included in the word count when they were used to represent an amount within the message such as this response BECAUSE IT HAS 31 DAYS (5 words). Similarly, an initial standing for a last name, was counted as a full word.

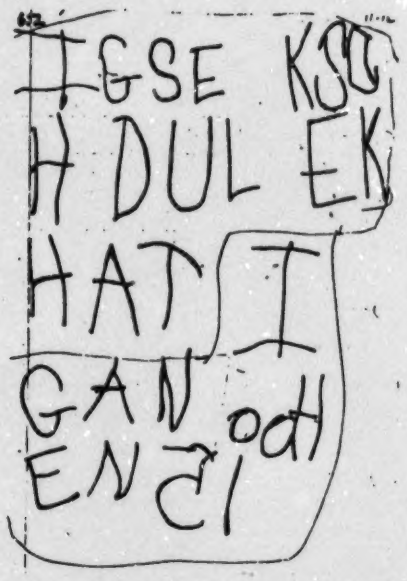

Figure 1. Search for child's meaning through study of writing samples: Journal, November 12 (Ted, 6:2), photo-reduced.

(I got sick. So how do you like that. I got a note. The end. p. 51.)

Figure 2. Search for meaning through study of writing samples: Journal, November 17 (Ted, 6:3), photo-reduced.

(It has been a nice day. So how do you like that. The end. p. 54.)

SCOTT H. is counted as two words (Figure 3).

When the word count was completed, a thousand-word sample for each child was selected to be used for comparative analyses of the writing of the six subjects. This sample was composed of three segments consisting of the first 200 words written, the middle 300, and the last 500. These segments were chosen in order to show changes during the academic year. The sample size reflected increased production for each period.

Types of Writing. Each piece of writing was classified according to its type. Protocols were classified as follows: journal, notes, and story.

Functions of Writing. The functional strategies were categorized based on the principles of Halliday's (1973) seven functions for oral language development. Only five of Halliday's seven functions were used by the subjects; thus, the writings were classified as follows: regulatory, interactional, personal, imaginative, and informative.

Audience. The pieces of writing were coded using categories loosely based on Britton's (1975) sense of audience category system. The various audiences are: self, teacher, known adults, peers and general audience.

Syntactic Development. The thousand-word sample was segmented according to Hunt's (1965, p. 20-23) T-unit analysis after deducting the following from the word count total: names used as signatures, headings and closings from notes, and dates. Only continuous text was used for coding (Figure 3).

The child's meaning was used to determine the number of words

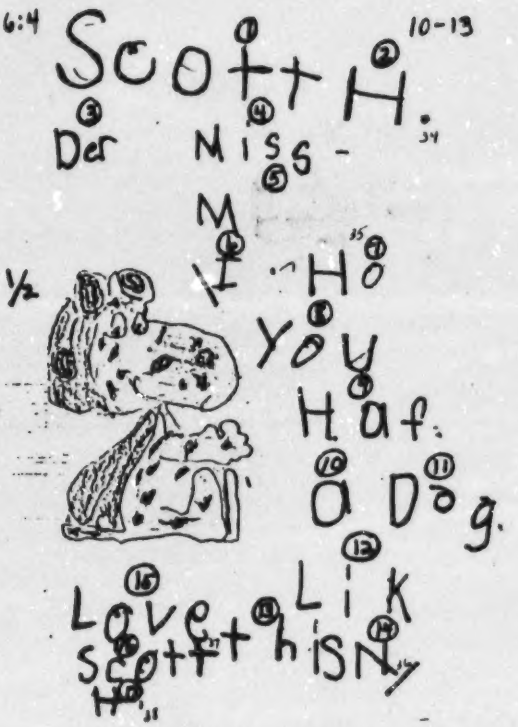

Figure 3. Sample illustrating word count of 17 words, T-unit markings, and conventional placement of punctuation: Note, October 13 (Scott, 6:4), photo-reduced.

(Scott H.
Dear Miss M
I hope you have a dog like this one.
Love,
Scott H.)

written as in this example:

AT THE DENTISTS OFFICE IGTMIEKLE

(At the dentist's office, I got my teeth cleaned)

The above is coded as 9 words, composed of one T-unit with two clauses.

<u>The Child's Use of Conventions of the Writing and Spelling Systems</u>

Word Boundaries, Linearity and Directionality, Utilization of Space and Letter Size. The pieces of writing were examined to establish and describe how the children were internalizing and using the rules of the spatial aspects of text.

Capital and Lowercase Letters. At the word level, the choice of capital or lowercase letters was coded according to initial, medial or final position. These judgments were considered in light of the word's placement within the sentence and on the page. On October 13 (Figure 3), Scott had 9 opportunities to use capital letters. He placed these 9 capitals conventionally. He created 39 opportunities to use lowercase forms. Although he placed 33 of these in appropriate places, he placed capital letters in the remaining 6 places, 4 in the initial position (H in Ho, H in Haf, D in Dog, L in Lik), 1 in the medial position (N in oNe), and 1 in the final position (K in LIK). Webster's New Collegiate Dictionary (1974) Handbook of Style was consulted to determine conventional usage. The data was tallied by segment to show changes in usage during the school year.

Spelling. Spellings were analyzed to provide information about the uses that children make of the orthographic system as they begin to spell. The conventional spelling was placed above the child's invented spelling as the data was read to determine meaning. These data were entered into a computer to determine how children's spellings changed over time.

Each day's spellings were entered as follows:

Subject	Date	Sex	Segment	Word	Spelling
2	10/13	M	1	Dear	Der
				Miss	Miss
				Milz	Milz

These entries were alphabetized by computer and listed according to the date to trace the development of a particular spelling:

Word	Child's Spelling	Subject	Date	Sex	Segment
HOPE	HO	2	10/13	M	1

An overall list of each word also yielded word frequencies and how often a word was conventionally spelled:

Word	Conv. Spell (%)	Frequency
A	100	34
HOPE	0	2
LIKE	86	43

Spellings were also analyzed to determine the influence of the language cueing systems, such as graphic and phonological, on the choices each child made in choosing a particular spelling.

Punctuation. The writing data was coded to note where punctuation opportunities were created by the child.

In the sample in Figure 3, for example, twice Scott placed a period after the initial representing his last name. He also could have placed commas after the opening, Dear Miss M, and the closing, Love, as well as a period at the end of his only sentence. He created 5 opportunities to punctuate, though he only used two of them. This data was tallied to determine which types of punctuation were used in the children's writing when they had a need for it.

Five categories emerged which provided insight into the ways children interact with the points at which convention calls for punctuation marks: omission, insertion, substitution, misplacement, and conventional usage. Comparisons between the three segments were made to show how the data examined changed over time. Webster's New Collegiate Dictionary's (1974) Handbook of Style was utilized to verify decisions. Several language textbooks at the upper elementary school levels were also consulted to determine conventional usage of punctuation.

General Background

Parent Survey. The following information obtained from the parents was noted for each subject: parent's educational background, parent's attitudes toward literacy, siblings, language usage in home, pre-first grade experiences, and at-home activities. This data contributed to the emerging profile of each beginning writer.

Classroom Observation. Written notes kept by the teacher on a daily basis were condensed into a list of experiences and activities occurring within the classroom. This information was used to describe the environmental influences on the writing of the six subjects.

Findings of the Study

The findings of the study based on the analysis of the writings according to the categories described above may be treated as hypotheses. Additional similar research is needed to determine if children in other classrooms develop similarly.

The construction of meaning must be the goal of all writers. Though a child may produce words, or even conventionally spelled sentences beginning with a capital letter and ending with a period, if there is no functional purpose the writing becomes sterile and useless. Evidence was found that the children in this study were prepared to write isolated words for their first pieces of school writing. They only wanted to write what they controlled conventionally. Yet as they were invited to interact and actually communicate with readers they began to focus on the construction of meaning. Just as the teacher believed they would, the children wrote and wrote and wrote.

When the children were given many opportunities to communicate in writing, the results suggested they learned to write in a similar way to the way they once learned to speak. Their writing developed in a social setting using the semantic and syntactic systems of language. As six-year-olds, they entered first grade understanding many aspects of writing, and they constantly grew and developed during the year.

Each of the subjects could write a note during the opening days of the study as well as write in a journal. Stories were not produced until mid-year. Conventionalized text features began to appear in the children's writing: Dear _____, Love _____, Once upon a time, The end. Words, phrases and sentences were used to present the child's ideas. The messages grew in complexity from simple sentences to compound and complex sentences. Transitions to more complex structures could be seen as two simple sentences were joined with . And. Single sentences often comprised a whole

piece of writing at the beginning of the study, while continuous text with a unified idea filled several pages at the close. The children were aware of the needs of an audience, could determine the type of writing which was appropriate in a particular setting, used syntactic features other writers of English produce, and wrote purposefully. The children's writing contained salient features that all adult users of the English language produce in their writing.

As the children wrote to interact with readers, they discovered that certain conventions are used by writers to aid the communication process: linearity and directionality, spacing between words, spelling, and punctuation. They did not ignore the conventions that writers use, and they learned how to use them in increasingly more complex ways as they expressed their feelings, thoughts and ideas.

The rate of development in the use of conventions varied according to how critical their effect was on meaning. Spacing between words, for example, was conventionalized early in the study. The six subjects used different spelling strategies after the first day of school, when all six spelled every word conventionally. Two children used conventional spelling all year, while the other four invented spellings to meet their needs. As the children wrote, they used words common to American English, and all six children moved to highly conventional forms of these high-frequency words used by all writers. The major area which did not show rapid growth during the period of the study was punctuation. Instead, the children frequently relied on spacing to separate sentences or

paragraphs. They created the places where punctuation could be placed but omitted the marks the majority of time. When punctuation was placed, it was often used to separate two sentences in the middle of the line. This may suggest that punctuation is a system that is not as crucial as spelling or spacing to the communication of the messages these writers constructed for their audiences.

To summarize, the significant findings related to the construction of meaning by young children are the following:

1. First graders are able to construct meaningful messages in writing.
2. School setting, as well as societal attitudes can influence children to focus on the conventions of writing while ignoring the need for writing to be meaningful.
3. First graders are able to learn to write in a way similar to the way they learned to speak--through social interaction and experiences with others.
4. Children's writing contains the salient features that adult users of the English language produce in their writing.
5. Children focus on conventions of writing as they realize print conveys a message and by using certain conventions they aid the reader in understanding their message.
6. The various writing conventions develop at different rates depending on how crucial they are to the writer's ability to construct meaning for a reader.

Implications

Children learning to write produce writing using rules which all language users must develop in order to understand each other. As they use writing to meet their own particu ar purposes, they also learn how to write. They constantly expand their capabilities to construct more varied and complex meanings. Children learning to write need teachers (and other persons) who will allow and encourage them to use writing as they develop control over the process of language. In 1978, Graves surveyed young writers in a report to the Ford Foundation. A typical response was that good writers should "be neat, space letters, spell good, and know words," yet Graves was unable to find even one child who spoke of writing as being able to provide information of interest to others (pp. 17-18). The children in this study demonstrated they could determine meaningful uses for writing which communicated to others. As they used writing they gained knowledge of the writing system and change occurred in their understanding of the system which allowed them to create more complex meanings for others.

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